WHAT IS CLAIMED IS:

1. A magnetic random access memory comprising:

a silicon substrate;

a transistor which has a gate electrode formed on the silicon substrate via a gate insulating film and diffusion layers formed in the silicon substrate;

a first insulating film formed on the silicon substrate and the transistor;

a multilayered interconnection formed in the first insulating film; and

a magneto-resistive element formed above the first insulating film,

wherein at least some of dangling bonds in the silicon substrate are terminated by silicon-deuterium bonds.

2. The memory according to claim 1, wherein the silicon-deuterium bonds exist at least partially in an interface portion between the gate insulating film and the silicon substrate under the gate electrode, junction portions of the diffusion layers, and a channel portion.

3. The memory according to claim 1, wherein deuterium atoms exist in the first insulating film.

4. The memory according to claim 1, wherein deuterium atoms exist in the gate electrode.

5. The memory according to claim 1, wherein deuterium atoms exist in the gate insulating film.

6. The memory according to claim 1, further comprising a second insulting film which is formed on the silicon substrate, including upper surfaces of the diffusion layers, and upper and side surfaces of the gate electrode and contains deuterium atoms.

7. The memory according to claim 1, wherein the magneto-resistive element is electrically connected to the transistor through part of the multilayered interconnection, and the transistor is a data read switching element.

8. The memory according to claim 1, wherein the transistor is a transistor of a CMOS circuit.

9. A method of manufacturing a magnetic random access memory comprising:

forming a gate electrode on a silicon substrate via a gate insulating film and forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate and the transistor;

forming a multilayered interconnection in the first insulating film;

executing annealing using a gas containing at least deuterium to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds; and

forming a magneto-resistive element above the

first insulating film.

10. The method according to claim 9, wherein the silicon-deuterium bonds exist at least partially in an interface portion between the gate insulating film and the silicon substrate under the gate electrode, junction portions of the diffusion layers, and a channel portion.

11. The method according to claim 9, wherein the annealing is executed using a gas containing deuterium and nitrogen.

12. The method according to claim 9, wherein deuterium atoms exist in the first insulating film.

13. The method according to claim 9, wherein the magneto-resistive element is electrically connected to the transistor through part of the multilayered interconnection, and the transistor is a data read switching element.

14. The method according to claim 9, wherein the transistor is a transistor of a CMOS circuit.

15. A method of manufacturing a magnetic random access memory comprising:

forming a gate electrode on a silicon substrate via a gate insulating film and forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate and the transistor by using a gas containing

at least deuterium and silane to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds;

forming a multilayered interconnection in the first insulating film; and

forming a magneto-resistive element above the first insulating film.

16. The method according to claim 15, wherein the gas is one of deuterated silane gas and deuterated silane chloride gas.

17. A method of manufacturing a magnetic random access memory comprising:

forming a gate electrode on a silicon substrate via a gate insulating film and forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate and the transistor;

forming a silicon nitride film on the first insulating film;

executing annealing using a gas containing at least deuterium to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds;

removing the silicon nitride film;

forming a multilayered interconnection in the first insulating film; and

forming a magneto-resistive element above the first insulating film.

18. A method of manufacturing a magnetic random access memory comprising:

forming a gate insulating film on a silicon substrate;

forming a gate electrode on the gate insulating film by using a gas containing at least deuterium and silane to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds;

forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate and the transistor;

forming a multilayered interconnection in the first insulating film; and

forming a magneto-resistive element above the first insulating film.

19. A method of manufacturing a magnetic random access memory comprising:

forming a gate insulating film on a silicon substrate by using a gas containing at least deuterium to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds;

forming a gate electrode on the gate insulating film;

forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate and the transistor;

forming a multilayered interconnection in the first insulating film; and

forming a magneto-resistive element above the first insulating film.

20. A method of manufacturing a magnetic random access memory comprising:

forming a gate insulating film on a silicon substrate and forming a gate electrode on the gate insulating film;

forming diffusion layers in the silicon substrate to form a transistor having the gate electrode and the diffusion layers;

forming a first insulating film on the silicon substrate, including upper surfaces of the diffusion layers, and upper and side surfaces of the gate electrode by using a gas containing at least deuterium to terminate at least some of dangling bonds in the silicon substrate by silicon-deuterium bonds;

forming a second insulting film on the silicon substrate and the transistor;

forming a multilayered interconnection in the second insulating film; and

forming a magneto-resistive element above the second insulating film.